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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,666	01/10/2005	Yuichi Komuro	01165.0933	9409

7590 11/09/2007

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EXAMINER	
CHOI, PETER Y	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
11/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,666	KOMURO ET AL.	
	Examiner	Art Unit	
	Peter Y. Choi	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In the instant case, claim 1 recites that the nonwoven fabric is "water integratable". The specification and disclosure as originally filed do not appear to disclose this specific characteristic or property of the nonwoven fabric.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 1-4, amended claim 1 recites that the nonwoven fabric is "water integratable". It is unclear what structure, property, or characteristic is intended by the phrase "water integratable", as the phrase may entail various limitations such as water absorbent, water transmissible, water combinable, etc.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, USPN 6,013,587 to Truong.

Regarding claims 1-4, Truong teaches a wiper of a nonwoven fabric consisting essentially of fibers entangled with each other with a high-pressure water jet stream, wherein the nonwoven fabric is water integratable, an amount of material dissolved therefrom into acetone is 340 mg/kg or less or 190 mg/kg or less and the nonwoven fabric contains cellulose filament fiber of 40% by weight or more (see entire document including column 2 lines 8-46, column 3 lines 18-43, column 4 lines 10-36, column 5 lines 10-17, column 5 line 65 to column 6 line 13, column 7 lines 21-33, column 8 lines 3-25, Table 17).

Regarding claims 1-4, Truong does not appear to specifically teach that the amount of micro-matter of 100μm or more falling-off therefrom is 20,000 pieces/m^2 or less or 14,000 pieces/m^2 or less as measured by a method using a supersonic wave, and the water absorption is 8 ml/g or more or 9 ml/g or more. Although the prior art does not disclose the claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the Truong reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (cupra ammonium fibers which are entangled with each other by a high-pressure water jet stream).

It should be noted that for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising."

Regarding claims 3 and 4, the cellulose filament fiber is cupra ammonium rayon (column 5 line 65 to column 6 line 13, column 8 lines 3-14).

Regarding claim 4, the content of the cellulose filament fiber is 85% by weight or more (column 5 line 65 to column 6 line 13, column 8 lines 3-14).

Response to Arguments

7. Applicants' arguments filed October 3, 2007, have been fully considered but they are not persuasive. Applicants argue that Truong differs from the field of use and the problems to be solved, since the claimed wiper has high level cleaning properties. Additionally, Applicants

argue that the amended claim which "consists essentially of the entangled fibers" excludes the inclusion of a binder.

Regarding Applicants' arguments, Examiner respectfully disagrees. Applicants have not claimed a use, intended use or a problem to be solved in the claim. Applicants have only claimed a wiper of a nonwoven fabric. Therefore, Applicants' arguments are not commensurate in scope with the claimed invention. Since Truong expressly teaches that the invention of Truong is used as a wipe and is drawn to a wipe which is absorbent, durable and nonwoven, and appears to comprise a substantially similar structure and composition as the claimed invention, Truong appears to anticipate or be obvious over the claimed invention.

Regarding Applicants' argument that the amended claim language excludes the inclusion of a binder, Examiner respectfully disagrees. The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristics of the claimed invention. As set forth above, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." The specification and the claims do not appear to teach that the basic and novel characteristics of the invention specifically exclude the inclusion of any amount of binder. Although the specification teaches that use of a resinous binder causes a problem in that the resin is dissolved in acetone, the claims recite the inclusion of acetone up to a claimed amount. Therefore, the addition of a binder does not appear to effect the basic and novel characteristics of the claimed invention.

Claim Rejections - 35 USC § 102/103

8. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, US Pub. No. 2003/0100240 to Takai.

Regarding claims 1-4, Takai teaches a wiper of a nonwoven fabric consisting essentially of fibers entangled with each other with a high-pressure water jet stream, wherein the nonwoven fabric is water integratable, an amount of material dissolved therefrom into acetone is 340 mg/kg or less or 190 mg/kg or less and the nonwoven fabric contains cellulose filament fiber of 40% by weight or more (see entire document including paragraphs 0002, 0011-0016, 0038, 0039, 0043, 0054-0056, 0060, 0065-0069, 0075).

Regarding claims 1-4, Takai does not appear to specifically teach that the amount of micro-matter of 100μm or more falling-off therefrom is 20,000 pieces/m^2 or less or 14,000 pieces/m^2 or less as measured by a method using a supersonic wave, and the water absorption is 8 ml/g or more or 9 ml/g or more. Although the prior art does not disclose the claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the Takai reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (cupra ammonium fibers which are entangled with each other by a high-pressure water jet stream).

It should be noted that for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising."

Regarding claims 3 and 4, the cellulose filament fiber is cupra ammonium rayon (paragraphs 0054- 0056, 0060).

Regarding claim 4, the content of the cellulose filament fiber is 85% by weight or more (paragraphs 0054-0056, 0060).

Response to Arguments

9. Applicants' arguments filed October 3, 2007, have been fully considered but they are not persuasive. Applicants argue that Takai differs from the field of use and the problems to be solved, since the claimed wiper has high level cleaning properties. Additionally, Applicants argue that Takai teaches a water disintegratable sheet as opposed to the claimed water integratable sheet.

Regarding Applicants' arguments, Examiner respectfully disagrees. Applicants have not claimed a use, intended use or a problem to be solved in the claim. Applicants have only claimed a wiper of a nonwoven fabric. Therefore, Applicants' arguments are not commensurate in scope with the claimed invention. Since Takai expressly teaches that the invention of Takai is used as a wipe and is drawn to a wipe which is absorbent, durable and nonwoven, and appears to comprise a substantially similar structure and composition as the claimed invention, Takai appears to anticipate or be obvious over the claimed invention.

Regarding Applicants' arguments as to the differences between a water disintegratable sheet and a water integratable sheet, Examiner respectfully disagrees. As best Examiner can determine, Applicants appear to argue that water disintegratable and water integratable contain inherently opposite meanings. However, whereas "water disintegratable" is a known term

defined in the art as a characteristic in which a material breaks into multiple pieces when immersed in water after a period of time, "water integratable" does not have such a definition. As set forth above, the phrase "water integratable", may entail various limitations such as water absorbency, water transmission, water combinable, etc. Additionally, the primary fibers of Takai are preferably biodegradable, including cupra ammonium rayon fibers. Therefore, cupra ammonium rayon fibers appear to be inherently water disintegratable fibers. As Takai teaches a substantially similar structure and composition as the claimed invention, Takai appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,093,190 to Kwok in view of Truong.

Regarding claims 1-4, Kwok teaches a wiper of a nonwoven fabric consisting essentially of fibers entangled with each other with a high-pressure water jet stream, wherein the nonwoven fabric is water integratable, an amount of micro-matter of 100μm or more falling-off therefrom is 20,000 pieces/m^2 or less or 14,000 pieces/m^2 or less, an amount of material dissolved therefrom into acetone is 340 mg/kg or less or 190 mg/kg or less (see entire document including column 1 line 5 to column 2 line 27, column 3 line 1 to column 4 line 4, Table 3, Table 4).

Regarding claims 1-4, Kwok does not appear to specifically teach the nonwoven fabric contains cellulose filament fiber of 40% by weight or more. However, Truong teaches a similar nonwoven wipe entangled with a high-pressure water jet stream, comprising acrylic or cupra ammonium rayon fibers (Truong, column 2 lines 8-46, column 3 lines 18-43, column 4 lines 10-

36, column 5 lines 10-17, column 5 line 65 to column 6 line 13, column 7 lines 21-33, column 8 lines 3-25, Table 17). It would have been obvious to one of ordinary skill in the wipe art at the time the invention was made to form the hydroentangled nonwoven wipe of Kwok, wherein cupra ammonium rayon fibers are substituted for acrylic fibers, as taught by Truong, motivated by the desire of forming a conventional absorbent wipe with suitable fibers, as Truong teaches that acrylic and cupra ammonium rayon fibers are functionally equivalent and interchangeable in the wipe art and such resulting product was predictable.

Regarding claims 1-4, Kwok in view of Truong does not appear to teach the micro-matter fall-off is measured by a method using a supersonic wave and that the water absorption is 8 ml/g or more or 9 ml/g or more. Although the prior art does not disclose the claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the references teach an invention with a substantially similar structure and chemical composition as the claimed invention (cupra ammonium fibers which are entangled with each other by a high-pressure water jet stream).

It should be noted that for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising."

Regarding claims 3 and 4, the cellulose filament fiber is cupra ammonium rayon (Truong, column 5 line 65 to column 6 line 13, column 8 lines 3-14).

Regarding claim 4, the content of the cellulose filament fiber is 85% by weight or more (Kwok, column 2 lines 8-16; Truong, column 5 line 65 to column 6 line 13, column 8 lines 3-14).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/
Primary Examiner, Art Unit 1794

/Peter Y. Choi/
Examiner, Art Unit 1794
November 7, 2007